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Terms	Documents
L7 and L3	133

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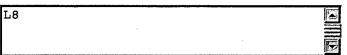
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Derwent World Patents Index

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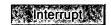
Search:











Search History

DATE: Tuesday, April 25, 2006 Printable Copy Create Case

Set Name side by side	Query	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
DB=P	GPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR		
<u>L8</u>	L7 and 13	133	<u>L8</u>
<u>L7</u>	(oligonucleotide\$ or nucleic or polynucleotide\$) same deliver\$	34006	<u>L7</u>
<u>L6</u>	L5 and deliver\$	232	<u>L6</u>
<u>L5</u>	L3 and (oligonucleotide\$ or nucleic or polynucleotide\$)	340	<u>L5</u>
<u>L4</u>	L3 same (oligonucleotide\$ or nucleic or polynucleotide\$) same deliver\$	4	<u>L4</u>
<u>L3</u>	osteoclast same precursor\$	497	<u>L3</u>
<u>L2</u>	L1 same (oligonucleotide\$ or nucleic or polynucleotide\$) same deliver\$	475	<u>L2</u>
<u>L1</u>	osteoclast (3n) precursor\$	313344	<u>L1</u>

END OF SEARCH HISTORY

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         (c) 2006 Contains copyrighted material
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S2	29	S1 AND (RANK (S) ANTISENSE)
S3	15	RD (unique items)

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Set
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3/3, K/1
DIALOG(R) File
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(c) 2006 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200510232026
0015537526
In situ hybridization on calcified tissue: detection of RANKL mRNA in mouse
  osteolytic bone lesions
AUTHOR: Kitazawa Riko (Reprint); Kitazawa Scohei
```

AUTHOR ADDRESS: Kobe Univ, Grad Sch Med, Div Mol Pathol, Chuo Ku, 7-5-1

Kusunoki Cho, Kobe, Hyogo 6500017, Japan**Japan

AUTHOR E-MAIL ADDRESS: riko@med.kobe-u.ac.jp

JOURNAL: Acta Histochemica et Cytochemica 38 (2): p143-149 2005 2005

ISSN: 0044-5991

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

- ... ABSTRACT: 4% paraformaldehyde for 2 days, decalcified with 20% EDTA in phosphate buffer for 5 days and embedded in paraffin. For in situ hybridization, digoxigenin-labeled *antisense* (or sense) single-stranded DNA probes were prepared by unidirectional PCR using cDNA of mouse RANKL amplified by RT-PCR. In the articular lesions of...
- ...well as in the pannus. Synovial cells around these osteoclasts were strongly positive for RANKL, indicating that synovial cells contribute to osteoclastogenesis through authentic RANKL-*RANK* signaling. In the tumor-induced osteolytic lesions of the mouse calvaria, osteoblasts and stromal cells between the tumor foci and the bone surface expressed RANKL . . .
- ...bone resorption was observed adjacent to the RANKL-positive cells. Histological evaluation of RANKL expression in bone lesions is important, because osteoclasts and the RANKL-*RANK* system could be potential targets for therapeutic drugs in diseases with accelerated bone resorption. DESCRIPTORS:

3/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0015363222 BIOSIS NO.: 200510057722

Antisense oligonucleotides targeting *RANK* and RANKL both prevent bone loss, but only *RANK* ASOs reduce inflammation in a rat model of adjuvant arthritis.

AUTHOR: Liu M (Reprint); Hull K; Cole H; Wang Y; Finger J; Chio L; Kulkarni N; Hoover J; Galvin R S; Ma Y; Bryan H U; Myers K J

AUTHOR ADDRESS: Eli Lilly and Co, Bone and Inflammat, Indianapolis, IN 46285 USA**USA

JOURNAL: Journal of Bone and Mineral Research 19 pS284 OCT 04 2004 CONFERENCE/MEETING: 26th Annual Meeting of the

American-Society-for-Bone-and-Mineral-Research Seattle, WA, USA October 01 -05, 2004; 20041001

SPONSOR: Amer Soc Bone & Mineral Res

ISSN: 0884-0431

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation LANGUAGE: English

Antisense oligonucleotides targeting *RANK* and RANKL both prevent bone loss, but only *RANK* ASOs reduce inflammation in a rat model of adjuvant arthritis.

DESCRIPTORS:

ORGANISMS: PARTS ETC: *osteoclast*--

CHEMICALS & BIOCHEMICALS: ...*RANK* {receptor activator of nuclear factor-kappa B...

...*RANK* *antisense* oligonucleotide {receptor activator of nuclear factor-kappa B *antisense* oligonucleotide

3/3,K/3 (Item 3 from file: 5)

DIALOG(R) File 5:Biosis Previews(R) (c) 2006 BIOSIS. All rts. reserv.

0015062379 BIOSIS NO.: 200400433168

In vitro blockade of receptor activator of nuclear factor-kappaB ligand prevents osteoclastogenesis induced by neuroblastoma cells

AUTHOR: Granchi Donatella (Reprint); Amato Ilaria; Battistelli Luca; Avnet Sofia; Capaccioli Sergio; Papucci Laura; Donnini Martino; Pellacani Andrea; Brandi Maria Luisa; Giunti Armando; Baldini Nicola

AUTHOR ADDRESS: Lab Pathophysiol, Ist Ortoped Rizzoli, Via Barbiano 1-10, I-40136, Bologna, Italy**Italy

AUTHOR E-MAIL ADDRESS: donatella.granchi.@ior.it

JOURNAL: International Journal of Cancer 111 (6): p829-838 October 10, 2004 2004

MEDIUM: print ISSN: 0020-7136

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Proliferation and differentiation of osteoclasts are regulated by a cytokine system that includes RANKL, which binds 2 receptors: *RANK*,

which activates *osteoclast* differentiation, and osteoprotegerin (OPG), a decoy receptor that limits RANKL action. We investigated the role of the OPG/ RANKL/*RANK* network in the pathogenesis of skeletal metastasis in neuroblastoma. Four different neuroblastoma cell lines (NB100, CHP212, SH-SY5Y, SJ-NK-P) showed a large amount...

...observed. SH-SYSY showed the lowest OPG-to-RANKL ratio and promoted osteoclastic differentiation of FLG29.1 and peripheral mononuclear cells, inducing expression of the *osteoclast* markers *RANK*, c-src, c-fos, cathepsin-K and TRAP. SJ-N-KP, which released both OPG and RANKL, did not show the same capability. OPG, neutralizing anti-RANKL antibody and *antisense* oligonucleotides were evaluated for their ability to inhibit RANKL activity. The neutralizing antibody hampered osteoclastic differentiation by blocking both the juxtacrine and the paracrine activity...

DESCRIPTORS:

- ...ORGANISMS: human neuroblastoma cell line, in-vitro gene therapy model system, in-vitro immunotherapy model system, *osteoclast* coculture
- ...human neuroblastoma cell line, in-vitro gene therapy model system, in-vitro immunotherapy model system, *osteoclast* coculture...
- ...human neuroblastoma cell line, in-vitro gene therapy model system, in-vitro immunotherapy model system, *osteoclast* coculture...
- ...human neuroblastoma cell line, in-vitro gene therapy model system, in-vitro immunotherapy model system, *osteoclast* coculture CHEMICALS & BIOCHEMICALS: receptor activator of nuclear factor-kappa-B ligand {*RANK* ligand...
- ...antibody induced blockade, *antisense* oligonucleotide induced blockade , tumor cell expression, tumor cell induced osteoclastogenesis prevention

3/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0014477125 BIOSIS NO.: 200300431969

Antisense oligonucleotide-mediated blockade of *RANK* inhibits *osteoclast* formation and enhances apoptosis in murine bone marrow-derived osteoclasts.

AUTHOR: Myers K J (Reprint); Li X (Reprint); Finger J (Reprint)
AUTHOR ADDRESS: Antisense Drug Discovery, Isis Pharmaceuticals, Carlsbad,
CA, USA**USA

JOURNAL: Journal of Bone and Mineral Research 17 (Suppl 1): pS344 September 2002 2002

MEDIUM: print

CONFERENCE/MEETING: Twenty-Fourth Annual Meeting of the American Society for Bone and Mineral Research San Antonio, Texas, USA September 20-24, 2002; 20020920

SPONSOR: American Society for Bone and Mineral Research

ISSN: 0884-0431 _(ISSN print)

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation LANGUAGE: English

Antisense oligonucleotide-mediated blockade of *RANK* inhibits
osteoclast formation and enhances apoptosis in murine bone

marrow-derived osteoclasts. DESCRIPTORS: ...ORGANISMS: PARTS ETC: *osteoclast*--... ...*osteoclast* precursor cell CHEMICALS & BIOCHEMICALS: *RANK*--... ...*RANK* mRNA {*RANK* messenger RNA 3/3,K/5 (Item 5 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2006 BIOSIS. All rts. reserv.

0014280747 BIOSIS NO.: 200300239466

Jun dimerization protein 2 (JDP2), a member of the AP-1 family of transcription factor, mediates *osteoclast* differentiation induced by RANKL.

AUTHOR: Kawaida Reimi; Ohtsuka Toshiaki (Reprint); Okutsu Junichi; Takahashi Tohru; Kadono Yuho; Oda Hiromi; Hikita Atsuhiko; Nakamura Kozo; Tanaka Sakae; Furukawa Hidehiko

AUTHOR ADDRESS: Biomedical Research Laboratories, Sankyo Co., Ltd., 1-2-58 Hiromachi, Shinagawa-ku, Tokyo, 140-8710, Japan**Japan

AUTHOR E-MAIL ADDRESS: tosiak@shina.sankyo.co.jp

JOURNAL: Journal of Experimental Medicine 197 (8): p1029-1035 April 21, 2003 2003

MEDIUM: print

ISSN: 0022-1007 _(ISSN print)

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

Jun dimerization protein 2 (JDP2), a member of the AP-1 family of transcription factor, mediates *osteoclast* differentiation induced by RANKL.

...ABSTRACT: are derived from hematopoietic cells of the monocyte/macrophage lineage. The receptor activator of NF-kappaB ligand (RANKL, also called ODF/TRANCE/OPGL) stimulates both *osteoclast* differentiation from *osteoclast* progenitors and activation of mature osteoclasts. To identify genes responsible for *osteoclast* differentiation, we used a molecular indexing technique. Here, we report a clone of one of these genes whose transcription is induced by soluble RANKL (sRANKL...

...in RAW264.7 cells. Infection of mouse primary bone marrow cells with retroviruses expressing JDP2-facilitated sRANKL-mediated formation of TRAP-positive multinuclear osteoclasts. Importantly, *antisense* oligonucleotide to JDP2 strongly suppressed sRANKL-induced *osteoclast* formation of RAW264.7 cells. Our findings suggest that JDP2 may play an important role in the *RANK*-mediated signal transduction system, especially in *osteoclast* differentiation.

DESCRIPTORS:

ORGANISMS: PARTS ETC: *osteoclast*--

3/3,K/6 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2006 INIST/CNRS. All rts. reserv.

16928588 PASCAL No.: 04-0593091

In vitro blockade of receptor activator of nuclear factor-kB ligand prevents osteoclastogenesis induced by neuroblastoma cells

GRANCHI Donatella; AMATO Ilaria; BATTISTELLI Luca; AVNET Sofia; CAPACCIOLI Sergio; PAPUCCI Laura; DONNINI Martino; PELLACANI Andrea; BRANDI Maria Luisa; GIUNTI Armando; BALDINI Nicola

Laboratory of Pathophysiology, Istituti Ortopedici Rizzoli, Bologna, Italy; Department of Experimental Pathology and Oncology, University of Florence, Florence, Italy; Department of Internal Medicine, University of Florence, Florence, Italy

Journal: International journal of cancer, 2004, 111 (6) 829-838 Language: English

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Proliferation and differentiation of osteoclasts are regulated by a cytokine system that includes RANKL, which binds 2 receptors: *RANK*, which activates *osteoclast* differentiation, and osteoprotegerin (OPG), a decoy receptor that limits RANKL action. We investigated the role of the OPG/RANKURANK network in the pathogenesis of skeletal...

... observed. SH-SY5Y showed the lowest OPG-to-RANKL ratio and promoted osteoclastic differentiation of FLG29.1 and peripheral mononuclear cells, inducing expression of the *osteoclast* markers *RANK*, c-src, c-fos, cathepsin-K and TRAP. SJ-N-KP, which released both OPG and RANKL, did not show the same capability. OPG, neutralizing anti-RANKL antibody and *antisense* oligonucleotides were evaluated for their ability to inhibit RANKL activity. The neutralizing antibody hampered osteoclastic differentiation by blocking both the juxtacrine and the paracrine activity

English Descriptors: Neuroblastoma; In vitro; Transcription factor NF kappa B; *Osteoclast*; Cell differentiation; Cancerology; Osteolysis; Human; Recepteur activator NF kappa B ligand; Bone metastasis; Osteoprotegerin

3/3,K/7 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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14597187 PMID: 14633785

Advances in biology and therapy of multiple myeloma.

Barille-Nion Sophie; Barlogie Bart; Bataille Regis; Bergsagel P Leif; Epstein Joshua; Fenton Robert G; Jacobson Joth; Kuehl W Michael; Shaughnessy John; Tricot Guido

INSERM U463, Institute of Biology, Nantes, France.

Hematology / the Education Program of the American Society of Hematology. American Society of Hematology. Education Program (United States) 2003, p248-78, ISSN 1520-4391--Print Journal Code: 100890099

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... translocation oncogenes and cyclins (TC molecular classification of MM) with different prognostic implications. In Section II, Drs. Barille-Nion and Bataille review new insights into *osteoclast* activation through the *RANK* Ligand/OPG and MIP-1 chemokine axes and osteoblast inactivation in the context of recent data on DKK1. The observation that myeloma cells enhance the...

... in expression levels of Bcl-2, Bcl-XL and Mcl-1. Mcl-1 is a candidate

target gene for rapid induction of apoptosis by flavoperidol. *Antisense* oglionucleotides (ASO) lead to the rapid induction of caspace activity and apoptosis, which was potentiated by dexamethasone. Similar clinical trials with Bcl-2 ASO molecules...

... cells, can act as a decoy receptor for TRAIL, thereby blocking its apoptosis-inducing activity. MM cells inhibit OPG release by stromal cells, thereby promoting *osteoclast* activation and lytic bone disease (by enhancing RANKL availability) while at the same time exposing themselves to higher levels of ambient TRAIL. Thus, as a...

3/3,K/8 (Item 1 from file: 266)

DIALOG(R) File 266: FEDRIP

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00557347

IDENTIFYING NO.: 5R01AR047700-05 AGENCY CODE: CRISP

PHYTOESTROGEN REGULATION OF BONE TURNOVER

PRINCIPAL INVESTIGATOR: BLAIR, HARRY C.

ADDRESS: BLAIRHC@MSX.UPMC.EDU UNIVERSITY OF PITTSBURGH BIOMEDICAL SCIENCE TOWER, RM S41 PITTSBURGH, PA 15261

PERFORMING ORG.: UNIVERSITY OF PITTSBURGH AT PITTSBURGH, PITTSBURGH, PENNSYLVANIA

SPONSORING ORG.: NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

DATES: 2008/17/00 TO 2006/30/05 FY: 2004

...SUMMARY: by interacting with estrogen receptors on supporting osteoblasts, thus reducing their expression of osteoclastogenic cytokines, such as CSF-1 (that activates the fms receptor) or *RANK*-ligand (that activates the NF-kB pathway. He also hypothesizes that phytoestrogens, such as genistein, in addition to their action on the estrogen receptor, also...

...Thus, in Specific Aim 1, the applicant proposes to assess the effects of phytoestrogens, genistein and daidzein, on (a) osteoblastic production of CSF-1 and *RANK*-ligand, (b) osteoclastic receptors and downstream signals for CSF-1 and *RANK*-L, and (c) the processes of osteoclastogenesis and osteoclastic bone resorption. In Specific Aim 2, the principal investigator intends to study the activity of phytoestrogens on *osteoclast* development and function when estrogen receptors are either eliminated through *antisense* approaches, or through the use of a specific antagonist, IC182780. In the same aim, the research team will also compare the binding of the two...

... or absence of estrogen receptors. In Specific Aim 3, the applicant proposes to characterize the non-estrogen receptor -mediated osteoclastic effects of phytoestrogen, specifically on *osteoclast* acid secretion in intact cells, and in isolated *osteoclast* membranes. Thus, through a systematic and logically set series of experiments, the principal investigator proposes to clarify a role for phytoestrogens in bone cell regulation.

DESCRIPTORS: laboratory mouse; polymerase chain reaction; hormone regulation /control mechanism; flavone; cytokine; colony stimulating factor; western blotting; immunoprecipitation; protein tyrosine kinase; density gradient ultracentrifugation; estrogen receptor; *osteoclast*; bone development; physiologic bone resorption; confocal scanning microscopy; northern blotting; enzyme activity; phytoestrogen; protein binding

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00556755

IDENTIFYING NO.: 5R01AR041336-13 AGENCY CODE: CRISP

OSTEOCLASTS FROM TRANSGENIC MICE

PRINCIPAL INVESTIGATOR: ROODMAN, GARSON D

ADDRESS: ROODMANGD@MSX.UPMC.EDU UNIVERSITY OF PITTSBURGH SOM E1152 BIOMED SCI TWER PITTSBURGH, PA 15261

PERFORMING ORG.: UNIVERSITY OF PITTSBURGH AT PITTSBURGH, PITTSBURGH, PENNSYLVANIA

SPONSORING ORG.: NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

DATES: 2009/30/91 TO 2008/31/05 FY: 2003

SUMMARY: During the last grant period, we developed an *osteoclast* (OCL) precursor cell line by targeting the bcl-XL and SV40 large T antigen genes to cells in the OCL lineage (B/T cells). These...

...the 4 genes we have recently identified that are overexpressed in mature OCLs compared to their precursors. We will transfect B/T cells treated with *RANK* ligand and M-CSF or vehicle in the absence of stromal cells with sense or *antisense* constructs for these genes, to enhance overexpression of these genes or block their effects and determine if OCLs or macrophages form. Based on these assays...

DESCRIPTORS: laboratory mouse; genetically modified animal; macrophage; cell differentiation; genetic manipulation; transfection; genetic mapping; gene expression; genetic promoter element; biological model; model design /development; acid phosphatase; *osteoclast*; tissue /cell culture; animal breeding; cell line; embryonic stem cell; gene targeting

3/3,K/10 (Item 3 from file: 266)

DIALOG(R) File 266: FEDRIP

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00494272

IDENTIFYING NO.: 144522; 0001; 646 AGENCY CODE: VA

Role of MIP-1 Alpha in Myeloma Bone Disease

PRINCIPAL INVESTIGATOR: Roodman, Garson D., M.D., Ph.D.

PERFORMING ORG.: Department of Veterans Affairs, Medical Center Pittsburgh, PA

SPONSORING ORG.: Department of Veterans Affairs, Research and Development (15), 810 Vermont Ave. N.W., Washington, D.C. 20420 United States of America

DATES: 20011107

...SUMMARY: poor prognosis in MM patients. The overall goals of this proposal are to determine the mechanism of action responsible for MIP-lalpha's effects on *osteoclast* (OCL) formation and define its role in myeloma bone disease (MBD).

RESEARCH DESIGN: To test this hypothesis, studies will be undertaken to determine the mechanism...

... the receptor(s) mediating MIP-1-alpha's effects on OCL formation. As part of these studies, the capacity of MIP-1-alpha to enhance *RANK* ligand expression in marrow stromal cells either by itself or in combination with other OAFs will be assessed. We will test the role of MIP-1-alpha in MBD in vivo by determining if decreased MIP-1-alpha production in ARH- 77 cells stably transfected with a MIP-1-alpha *antisense* construct enhances the survival and decreases the MBD in SCID mice transplanted with these cells.

These results will be compared to SCID mice implanted with...

3/3, K/11(Item 1 from file: 357) DIALOG(R) File 357: Derwent Biotech Res. (c) 2006 Thomson Derwent & ISI. All rts. reserv.

0348003 DBR Accession No.: 2004-20295 PATENT Delivering oligonucleotides into osteoclasts or *osteoclast* precursor cells to modulate *osteoclast* differentiation comprises transfecting cells with the oligonucleotides and a non-liposomal transfection agent (e.g. FuGENE 6) - antisense oligonucleotide administration for use RNA expression inhibition for use in bone disease gene therapy

AUTHOR: BAKER B F; MYERS K; FINGER J PATENT ASSIGNEE: ISIS PHARM INC 2004

PATENT NUMBER: US 20040137623 PATENT DATE: 20040715 WPI ACCESSION NO.:

2004-533382 (200451) PRIORITY APPLIC. NO.: US 666909 APPLIC. DATE: 20030917 NATIONAL APPLIC. NO.: US 666909 APPLIC. DATE: 20030917

LANGUAGE: English

Delivering oligonucleotides into osteoclasts or *osteoclast* precursor cells to modulate *osteoclast* differentiation comprises transfecting cells with the oligonucleotides and a non-liposomal transfection agent (e.g. FuGENE 6) - antisense oligonucleotide administration for use RNA expression inhibition...

ABSTRACT: NOVELTY - Delivering a compound 8-80 ABSTRACT: DERWENT nucleobases in length into bone marrow-derived *osteoclast* precursor cells, into primary *osteoclast* cells or into a cell line whose cells are capable of differentiating into osteoclasts, comprises transfecting the cells with the compound in the presence of a non-liposomal transfection agent. DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is also included for the method of modulating *osteoclast* differentiation, comprising delivering a compound 8-80 nucleobases in length into bone marrow-derived *osteoclast* precursor cells, the compound targeted to a nucleic acid molecule encoding *RANK* and capable of binding a region of the nucleic acid molecule encoding *RANK*, where the *osteoclast* differentiation of the bone marrow-derived *osteoclast* precursor cells is modulated by the compound. WIDER DISCLOSURE - Also disclosed are the pharmaceutical compositions and formulations that include the *antisense* compound. BIOTECHNOLOGY - Preferred Method: In delivering the compound cited above into bone marrow-derived *osteoclast* precursor cells, the transfecting occurs during early differentiation of the bone marrow-derived *osteoclast* precursor cells. The bone marrow-derived *osteoclast* precursor cells are cultured in the presence of *RANK* -ligand (RANKL) and macrophage colony stimulating factor (MCSF), where the early differentiation is after day 2 or before day 4 of the culturing. The cell line is RAW264.7. In modulating *osteoclast* differentiation, the delivering comprises transfecting the compound into the bone marrow-derived *osteoclast* precursor cells. The compound inhibits the expression of *RANK* mRNA by at least 10% upon transfection. The transfecting is performed in the presence of a non-liposomal transfection agent. The non-liposomal transfection agent is Effectene (RTM) or FuGENE 6. The compound is 12-50 (preferably 15-30) nucleobases in length. In addition, the compound comprises an (*antisense*) oligonucleotide, a DNA, RNA or a chimeric oligonucleotide. At least a portion of the compound hybridizes with RNA to form an oligonucleotide-RNA duplex. The compound is at least 70% (preferably at least 99%) complementary to the region of the nucleic acid molecule encoding *RANK* . ACTIVITY - Osteopathic. No biological data given.

MECHANISM OF ACTION - *Antisense* therapy. No biological data given.

USE - The methods and composition are useful for delivering oligonucleotide compounds into osteoclasts or *osteoclast* precursor cells to modulate *osteoclast* differentiation. These may be used for treating patients with subnormal bone conditions or for discovering diagnostics and therapeutics for bone diseases associated with *osteoclast* activity (e.g. osteoporosis or osteopetrosis).

ADMINISTRATION - Dosage is 0.01 micrograms/kg to 100 g/kg of body weight, and may be given once...

DESCRIPTORS: FuGENE, Effectene mediated *RANK*-specific *antisense* oligonucleotide, *antisense* DNA, *antisense* RNA administration, expression in bone marrow-derived *osteoclast*, *osteoclast* precursor cell, appl. osteoporosis, osteopetrosis, bone disease gene therapy DNA sequence RNA sequence (23, 41)

3/3,K/12 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 Thomson Derwent & ISI. All rts. reserv.

0338352 DBR Accession No.: 2004-10644 PATENT

Resisting *osteoclast* formation, comprises inhibiting eosinophil chemotactic factor-L or receptor activator of nuclear factor kappa B ligand expression or activity - antisense oligonucleotide transfer and expression in host cell for gene therapy

AUTHOR: ROODMAN D G; CHOI S J; OBA Y PATENT ASSIGNEE: UNIV PITTSBURGH 2004

PATENT NUMBER: WO 200420606 PATENT DATE: 20040311 WPI ACCESSION NO.: 2004-239186 (200422)

PRIORITY APPLIC. NO.: US 407335 APPLIC. DATE: 20020830 NATIONAL APPLIC. NO.: WO 2003US27319 APPLIC. DATE: 20030829 LANGUAGE: English

Resisting *osteoclast* formation, comprises inhibiting eosinophil chemotactic factor-L or receptor activator of nuclear factor kappa B ligand expression or activity - antisense oligonucleotide transfer and expression in...

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Resisting *osteoclast* formation comprises inhibiting eosinophil chemotactic factor-L (ECF-L) or receptor activator of nuclear factor kappa B ligand (RANKL) expression or activity, or inhibiting mouse...

...an isolated anti-eosinophil chemotactic factor-L (ECF-L) antibody or its fragment capable of inhibiting or neutralizing ECF-L activity. BIOTECHNOLOGY - Preferred Method: Resisting *osteoclast* formation includes inhibiting by means of an anti-eosinophil chemotactic factor-L (ECF-L) antibody, *antisense* S-oligonucleotide to ECF-L, mouse ECF-L polyclonal antisera, rabbit pre-immune antisera, OPG, receptor activator94) of nuclear factor kappa B (*RANK*)-Fc, or anti-*RANK* ligand polyclonal antibody. The method is employed in human cells, preferably in vivo. Preferred Antibody: The anti-ECF-L antibody is a monoclonal antibody or its active fragment. The antibody or its fragment is human or humanized. The antibody is capable of inhibiting ECF-L-induced *osteoclast* formation. USE - The methods and antibodies are useful for inhibiting or resisting *osteoclast* formation. EXAMPLE - *Antisense* S-oligonucleotide, which included the ATG and ribosome-binding site of the mouse eosinophil chemotactic factor-L (mECF-L) gene, was added at varying concentrations to mouse bone marrow cultures stimulated with 10-9 M 1,25-dihydroxyvitamin D3. *Antisense* S-oligonucleotide significantly inhibited *osteoclast* formation by

about 40% in murine bone marrow cultures compared with the control cultures treated with sense S-oligonucleotide.(44 pages)

DESCRIPTORS: mouse eosinophil chemotactic factor-L ATG ribosome binding site gene-specific antisense oligonucleotide transfer, expression in mouse bone marrow, human antibody, humanized antibody, appl.

osteoclast formation resistance, inhibition gene therapy protein mammal animal antibody engineering (23, 21)

3/3,K/13 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2006 Thomson Derwent & ISI. All rts. reserv.

0336805 DBR Accession No.: 2004-09097 PATENT

New isolated *Rank*-Associated Inhibitor (RAIN) polypeptides, useful for treating a subject with bone loss by inhibiting *osteoclast* precursor cell fusion - vector-mediated gene transfer and expression in host cell for recombinant protein production, drug screening and gene therapy

AUTHOR: DARNAY B G

PATENT ASSIGNEE: UNIV TEXAS SYSTEM 2004

PATENT NUMBER: WO 200411620 PATENT DATE: 20040205 WPI ACCESSION NO.:

2004-143848 (200414)

PRIORITY APPLIC. NO.: US 399205 APPLIC. DATE: 20020729 NATIONAL APPLIC. NO.: WO 2003US23801 APPLIC. DATE: 20030729 LANGUAGE: English

- New isolated *Rank*-Associated Inhibitor (RAIN) polypeptides, useful for treating a subject with bone loss by inhibiting *osteoclast* precursor cell fusion vector-mediated gene transfer and expression in host cell for recombinant protein production, drug screening and gene therapy
- ... ABSTRACT: following: (1) an isolated polynucleotide comprising a nucleic acid encoding a RAIN polypeptide; (2) a method of treating a subject with bone loss comprising inhibiting *osteoclast* precursor cell fusion by administering a RAIN polypeptide to modulate *RANK* signaling, or an polynucleotide the vector comprising transcriptional control of a promoter; (3) a method for inhibiting *osteoclast* precursor cell fusion by contacting an *osteoclast* precursor cell with an expression vector that expresses a RAIN polypeptide; and (4) a method for identifying a modulator of an *osteoclast* precursor fusion by providing a cell deficient in a RAIN polypeptide; contacting the cell with a candidate substance; and comparing *osteoclast* cell fusion observed when the candidate substance is not added, where the alteration in *osteoclast* cell fusion indicates that the candidate substance is a modulator of an *osteoclast* cell fusion. BIOTECHNOLOGY - Preferred Molecule: The isolated polypeptide contains at least 15, 20, 25, 30, 50 or all of the amino acids of S1-S4...
- ... cytomegalovirus, and adeno-associated virus. In the inhibition method, the expression vector is a plasmid or viral expression vector. In identifying a modulator of an *osteoclast* precursor fusion, the candidate substance is a second cell, a cancer cell, a multiple myeloma cell, a peptide, a peptide mimetic or a small molecule...
- ... The candidate substance is a protein or a RAIN analogue. The cell deficient in a RAIN polypeptide comprises an activated RAIN gene, and expresses an *antisense* RAIN nucleic acid. ACTIVITY Osteopathic. No biological data given. MECHANISM OF ACTION *Osteoclast* precursor cell fusion inhibitor. USE The polypeptide, expression vector and methods are useful for treating a subject with bone loss (claimed).

ADMINISTRATION - The expression vector...

DESCRIPTORS: recombinant *Rank*-Associated Inhibitor prep., plasmid, vaccinia virus, adeno virus, herpes virus, retro virus, cytomegalo virus, adeno-associated virus vector-mediated Kaposi fibroblast growth factor signal peptide, HIV virus-1 Tat signal peptide gene transfer, expression in host cell, *antisense* oligonucleotide, *osteoclast* precursor fusion, cancer cell, multiple myeloma cell, peptide, peptide mimetic, small molecule modulator identification, appl. drug screening, bone loss therapy, gene therapy protein pox virus...

3/3,K/14 (Item 1 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

(c) 2006 American Chemical Society. All rts. reserv.

141099744 CA: 141(7)99744k PATENT

Methods for delivery of antisense oligonucleotides regulating cytokine receptor RANK mRNA into osteoclasts for treatment of osteoporosis INVENTOR(AUTHOR): Baker, Brenda F.; Myers, Kathleen; Finger, Joshua LOCATION: USA

ASSIGNEE: Isis Pharmaceuticals, Inc.

PATENT: U.S. Pat. Appl. Publ.; US 20040137623 A1 DATE: 20040715 APPLICATION: US 666909 (20030917) *WO 2000US29828 (20001030) *US 111868 (20020806)

PAGES: 54 pp., Cont.-in-part of U.S. Ser. No. 111,868. CODEN: USXXCO

LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: 435455000; A61K-048/00A; C12N-015/85B

3/3,K/15 (Item 2 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2006 American Chemical Society. All rts. reserv.

136258296 CA: 136(17)258296f PATENT

Screening assays for effectors of receptor activator of NF-.kappa.B and their use in cell signaling

INVENTOR (AUTHOR): Dougall, William C.

LOCATION: USA

ASSIGNEE: Immunex Corporation

PATENT: PCT International; WO 200224896 A2 DATE: 20020328 APPLICATION: WO 2001US29857 (20010920) *US PV235157 (20000922)

PAGES: 51 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: C12N-015/00A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PH; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

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         (c) 2006 CAB International
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         (c) 2006 Contains copyrighted material
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         (c) format only 2006 Dialog
*File 156: ToxFile has resumed updating with UD20051205.
 File 162:Global Health 1983-2006/Mar
         (c) 2006 CAB International
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removal, customized scheduling. See HELP ALERT.
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         (c) Beilstein GmbH
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         (c) 2006 ProQuest Info&Learning
       91:MANTIS(TM) 1880-2006/Feb
         2006 (c) Action Potential
  File 149:TGG Health&Wellness DB(SM) 1976-2006/Apr W2
         (c) 2006 The Gale Group
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         (c) format only 2002 Dialog
*File 159: Cancerlit is no longer updating.
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         (c) 2006 BLHCIS
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         (c) 2001 Informania Ltd.
                                                                        7.
*File 467: F467 will close on February 1, 2006.
      Set Items Description
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           57360 OSTEOCLAST
           8365 TRANSFECT
             16 OSTEOCLAST AND TRANSFECT
? rd
>>>Duplicate detection is not supported for File 393.
>>>Records from unsupported files will be retained in the RD set.
               8 RD (unique items)
? show files;ds;t/3,k/all
       5:Biosis Previews(R) 1969-2006/Apr W3
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     73:EMBASE 1974-2006/Apr 26
         (c) 2006 Elsevier Science B.V.
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     94:JICST-EPlus 1985-2006/Jan W5
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         (c) 2005 The HW Wilson Co.
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File 357:Derwent Biotech Res. _1982-2006/Apr W3
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File 358:Current BioTech Abs 1983-2006/Jan
          (c) 2006 DECHEMA
File 369: New Scientist 1994-2006/Sep W1
         (c) 2006 Reed Business Information Ltd.
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         (c) 1999 AAAS
File 399:CA SEARCH(R) 1967-2006/UD=14418
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     41:Pollution Abstracts 1966-2006/Mar
File
         (c) 2006 CSA.
     50:CAB Abstracts 1972-2006/Mar
         (c) 2006 CAB International
File 103: Energy SciTec 1974-2006/Mar B2
         (c) 2006 Contains copyrighted material
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File 162:Global Health 1983-2006/Mar
         (c) 2006 CAB International
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Set Items Description

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S2 8 RD (unique items)

>>>KWIC option is not available in file(s): 399

2/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

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0015751040 BIOSIS NO.: 200600096435

Optimized transfection of diced siRNA into mature primary human

osteoclasts: Inhibition of cathepsin K mediated bone resorption by siRNA AUTHOR: Selinger Christina I; Day Christopher J; Morrison Nigel A (Reprint) AUTHOR ADDRESS: Griffith Univ, Sch Med Sci, Gold Coast Campus, Parklands Dr, Southport, Qld 4215, Australia**Australia

AUTHOR E-MAIL ADDRESS: N.Morrison@griffith.edu.au

JOURNAL: Journal of Cellular Biochemistry 96 (5): p996-1002 DEC 1 2005

2005

ISSN: 0730-2312

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

...ABSTRACT: resorption is dependent on the liberation of calcium by acid and protease destruction of the bone matrix by proteinases. The key proteinase produced by the *osteoclast* is cathepsin K. Targeted knock-down of cathepsin K was performed using small inhibitory RNA (siRNA). siRNA is a method that introduces short double-stranded...

...numbers (P= 0.018) and resorbed area (P= 0.013). We also show that FuGENE 6 is an effective lipid transfection reagent with which to *transfect* primary human osteoclasts, that does not produce off-target effects.

DESCRIPTORS:

ORGANISMS: PARTS ETC: *osteoclast*--

2/3,K/2 (Item 2 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

(c) 2006 BIOSIS. All rts. reserv.

0015230365 BIOSIS NO.: 200500137002

TNF-alpha expression is transcriptionally regulated by RANK ligand AUTHOR: Zou W; Amcheslavsky A; Takeshita S; Drissi H; Bar-Shavit Z (Reprint)

AUTHOR ADDRESS: Fac MedH Hubert Humphrey Ctr Expt Med and Canc Res, Hebrew Univ Jerusalem, POB 12272, Jerusalem, 91120, Israel**Israel

AUTHOR E-MAIL ADDRESS: barsha@cc.huji.ac.il

JOURNAL: Journal of Cellular Physiology 202 (2): p371-378 February 2005

2005

MEDIUM: print ISSN: 0021-9541

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

- ...ABSTRACT: RANKL) is accompanied by increased TNF-alpha expression. In the present study we investigated the mechanism by which RANKL induces expression of TNF-alpha in *osteoclast* precursors. The macrophage-like cell-line, RAW 264.7 was used as a model for *osteoclast* precursors. To examine if RANKL-mediated increase in TNF-alpha expression involves increased stability of its transcript, RAW264.7 cells were treated with or without...
- ...alpha promoter fused to luciferase, as well as four mutants of this promoter carrying mutations in each of the four NF-kappaB sites to stably *transfect* RAW 264.7 cells. Reporter activity was increased in response to RANKL in wild type promoter transfected cells, whereas treatment of the mutants' transfected cells...

 DESCRIPTORS:

ORGANISMS: PARTS ETC: *osteoclast*--

2/3,K/3 (Item 1 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci (c) 2006 Inst for Sci Info. All rts. reserv.

02614179 Genuine Article#: LP949 No. References: 23

Title: REGULATION OF CELL-GROWTH AND ALTERATION OF GENE-EXPRESSION IN HUMAN HEPATOMA-CELLS BY A CARP MATERNAL GENE

Author(s): YEH PY; YEW FH

Corporate Source: ACAD SINICA/TAIPEI 115//TAIWAN/

Journal: BULLETIN OF THE INSTITUTE OF ZOOLOGY ACADEMIA SINICA, 1993, V32,

N3 (JUL), P204-213 ISSN: 0001-3943

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: human hepatoma cells by a carp maternal gene. Bull. Inst. Zool., Academia Sinica 32(3): 204-213. A carp maternal cDNA library was used to *transfect* tumor-like tilapia ovary cells in culture, and a plasmid was subsequently rescued from a single cell clone. Transfection of the rescued plasmid into human...

Research Fronts: 91-0105 001 (BASIC FIBROBLAST GROWTH-FACTOR; HEPARIN AUGMENTS *OSTEOCLAST* RESORPTION-STIMULATING ACTIVITY IN SERUM; DISTINCT EXPRESSION PATTERN)

91-0133 001 (RETINOBLASTOMA PROTEIN; TUMOR SUPPRESSOR GENES; P53 MUTATIONS; HUMAN PAPILLOMAVIRUS TYPE-16 E7)

2/3,K/4 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

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13353907 EMBASE No: 2005418368

Unsatisfactory gene transfer into bone-resorbing osteoclasts with liposomal transfection systems

Laitala-Leinonen T.

T. Laitala-Leinonen, Institute of Biomedicine, Department of Anatomy, University of Turku, Turku Finland

AUTHOR EMAIL: tilale@utu.fi

Journal of Negative Results in BioMedicine (J. NEGAT. RESULTS BIOMED.) (United Kingdom) 29 AUG 2005, 4/-

ISSN: 1477-5751

DOCUMENT TYPE: Journal ; Article SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH NUMBER OF REFERENCES: 25

Background: Bone-resorbing osteoclasts are multinucleated cells that are formed via fusion of their hematopoietic stem cells. Many of the details of *osteoclast* formation, activation and motility remain unsolved. Therefore, there is an interest among bone biologists to *transfect* the terminally differentiated osteoclasts and follow their responses to the transgenes in vitro. Severe difficulties in transfecting the large, adherent osteoclasts have been encountered, however, making the use of modern cell biology tools in *osteoclast* research challenging. Transfection of mature osteoclasts by non-viral gene transfer systems has not been reported. Results: We have systematically screened the usefulness of several...

...were found and those cells that remained alive, failed to form osteoclasts when cultured in the presence of RANKL and M-CSF, key regulators of *osteoclast* formation. In comparison, adenoviral gene delivery resulted in the transfection of CD34-positive cells that remained GFP-positive for up to 5 days and allowed *osteoclast* formation. Conclusion: Osteoclasts and their precursors are sensitive to liposomal transfection systems, which induce *osteoclast* apoptosis. Gene transfer to mononuclear *osteoclast* precursors or differentiated osteoclasts was not possible with any of the commercial transfection systems tested. Osteoclasts are non-dividing, adherent cells that are difficult to grow as confluent cultures, which may explain problems with transfection reagents. Large numbers of alphaSUBvbetaSUB3 integrin on the *osteoclast* surface allows adenovirus endocytosis and infection proceeds in dividing and non-dividing cells efficiently. Viral gene delivery is therefore currently the method of choice for *osteoclast* transfection. (c) 2005 Laitala-Leinonen; licensee BioMed Central Ltd. DRUG DESCRIPTORS: enhanced green fluorescent protein; actin; CD34 antigen; *osteoclast*

differentiation factor; colony stimulating factor 1 MEDICAL DESCRIPTORS:

*gene transfer; *osteolysis; **osteoclast*; *DNA transfection CAS REGISTRY NO.: 200145-93-3 (*osteoclast* differentiation factor); 81627-83-0 (colony stimulating factor 1)

(Item 1 from file: 266) 2/3,K/5

DIALOG(R) File 266: FEDRIP

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00556755

AGENCY CODE: CRISP IDENTIFYING NO.: 5R01AR041336-13

OSTEOCLASTS FROM TRANSGENIC MICE

PRINCIPAL INVESTIGATOR: ROODMAN, GARSON D

ADDRESS: ROODMANGD@MSX.UPMC.EDU UNIVERSITY OF PITTSBURGH SOM E1152 BIOMED SCI TWER PITTSBURGH, PA 15261

PERFORMING ORG.: UNIVERSITY OF PITTSBURGH AT PITTSBURGH, PITTSBURGH, PENNSYLVANIA

SPONSORING ORG.: NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

FY: 2003 DATES: 2009/30/91 TO 2008/31/05

SUMMARY: During the last grant period, we developed an *osteoclast* (OCL) precursor cell line by targeting the bcl-XL and SV40 large T antigen genes to cells in the OCL lineage (B/T cells). These...

... in OCL formation in vitro of the 4 genes we have recently identified

that are overexpressed in mature OCLs compared to their precursors. We will *transfect* B/T cells treated with RANK ligand and M-CSF or vehicle in the absence of stromal cells with sense or antisense constructs for these...

DESCRIPTORS: laboratory mouse; genetically modified animal; macrophage; differentiation; genetic manipulation; transfection; genetic mapping; gene expression; genetic promoter element; biological model; model design /development; acid phosphatase; *osteoclast*; tissue /cell culture; animal breeding; cell line; embryonic stem cell; gene targeting

(Item 1 from file: 357) 2/3,K/6 DIALOG(R) File 357: Derwent Biotech Res.

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0333998 DBR Accession No.: 2004-06290 PATENT

Family of polypeptides having amino acid sequences that influence tooth development, Wnt pathway activation, bone deposition, and/or ocular development - involving vector-mediated gene transfer and expression in mouse embryonic stem cell

AUTHOR: KRUMLAUF R; ELLIES D

PATENT ASSIGNEE: STOWERS INST MEDICAL RES 2003

PATENT NUMBER: WO 2003106657 PATENT DATE: 20031224 WPI ACCESSION NO.:

2004-082189 (200408)

PRIORITY APPLIC. NO.: US 388970 APPLIC. DATE: 20020614 NATIONAL APPLIC. NO.: WO 2003US19260 APPLIC. DATE: 20030616 LANGUAGE: English

- ... ABSTRACT: stop codon at the beginning of Wise/Sost/LRP nucleic acid to form a cassette, forming a plasmid from the cassette, transfecting a host cell (*osteoclast*/osteoblast) with the plasmid and activating the stop codon to cause loss of function mutation; (2) forming an antisense RNA from a Wise/Sost/LRP...
- ... transfection, and freshly passaged HEK293 suspension cells were prepared. FuGENE 6 reagent: DNA ratios of 3:2, 3:1 and 6:1 were used to cells. After incubation, cells *transfect* HEK293 suspension supernatants, containing the polypeptide of interest (Wise, Sost, LRP5, and LRP6 polypeptides) were collected on days 1, 2, 3...

2/3,K/7 (Item 2 from file: 357)

DIALOG(R) File 357: Derwent Biotech Res.

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0304761 DBR Accession No.: 2003-06546 PATENT

Assessing hormonal effects of compounds, useful in testing drugs, from effect on interaction of nuclear receptor and co-modulator, also diagnosing diseases caused by improper co-modulation - vector-mediated gene transfer and expression in host cell and DNA probe for disease diagnosis

AUTHOR: OBENDORF M; SCHROEDER J; WOLF S

PATENT ASSIGNEE: JENAPHARM GMBH and CO KG 2002

PATENT NUMBER: EP 1255113 PATENT DATE: 20021106 WPI ACCESSION NO.:

2003-095131 (200309)
PRIORITY APPLIC. NO.: DE 1061325 APPLIC. DATE: 20011213 NATIONAL APPLIC. NO.: EP 20029699 APPLIC. DATE: 20020429 LANGUAGE: German

... ABSTRACT: A cDNA fragment encoding the amino acid 813-1390 region of the co-modulator ARAP11 was cloned into vector CMX and the product used to *transfect* SH-SY5Y cells, together with pSG5-AR (androgen receptor) and an MMTV luciferase reporter vector. Expression of ARAP11 caused strong co-activation of the AR...

DESCRIPTORS: ...activated, retinoic acid, retinoid-X, orphan receptor, co-modulator ARAP11, luciferase reporter gene transfer, expression in prostate, nerve, glial, blood, epithelial, muscle cell, fibroblast, osteoblasts, *osteoclast*, hepatocyte, drug screening, protein-protein, protein-DNA interaction det., DNA probe, antibody, reverse transcription-polymerase chain reaction, ELISA, cDNA library, appl. prostate cancer, erectile dysfunction...

2/3,K/8 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0166575 DBR Accession No.: 94-09126 PATENT

Stroma cell culture comprising SV40 DNA with a defective replication origin

- application as a feeder cell or in production of granulocyte colony

stimulating factor and interleukin-6

PATENT ASSIGNEE: GSF-Forschungszentrum-Umwelt-Gesundheit 1994
PATENT NUMBER: DE 4322570 PATENT DATE: 940616 WPI ACCESSION NO.:
94-177419 (9422)

PRIORITY APPLIC. NO.: DE 4322570 APPLIC. DATE: 930707 NATIONAL APPLIC. NO.: DE 4322570 APPLIC. DATE: 930707 LANGUAGE: German

- ...ABSTRACT: the T antigen. Specified cell lines have been deposited as DSM ACC 2055 and DSM ACC 2056. Plasmid pUC-IN-1 wt is used to *transfect* bone marrow cells using liposomes. The transfected cells are selected by repeated passaging and after 25-30 passages the immortalized cells reach a growth crisis...
- ... defective, spontaneous changes in the cell line caused by virus production cannot occur. The cell lines are used as feeder layers for hematopoietic cells and *osteoclast* precursors, for production of growth factors (granulocyte colony stimulating factor and interleukin-6), and for expressing genes cloned in vectors which replicate under control of...

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       40:Enviroline(R) 1975-2006/Mar
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         (c) 2006 CAB International
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removal, customized scheduling. See HELP ALERT.
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         2006 (c) Action Potential
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